Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 7  
Chapter 4 – Expressions and Equations Notes #10  
   
 Complete each problem together as a group!

1.  A landscaper charges $30 for each job plus an additional $20 per hour worked. If the landscaper earned $130 one day, **write an equation that could be used to find the number of hours he worked.** Let’s do this one together!  
    Let *h* = \_\_\_\_\_\_\_\_\_\_\_\_\_ Solution:

Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_

  
  
  
  
2) Jaun has $32 to spend at an amusement park. If admission is $8 and each ticket costs $4, **write an equation to determine how many tickets he can buy, then solve the equation.** Let *x* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Solution:

Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) **Write an expression for the sequence of operations described:**

a) Add 3 to x, subtract 1 from the result, then double what you have.

Expression: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b) Add 3 to x, double what you have, then subtract the result from 1.  
  
 Expression: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) **Write an equation based on the word problem below, then use it to solve the problem.**Jacquelyn is playing a game. She gets points deducted each time she answers a question incorrectly and earns points when she answers questions correctly. She got 5 questions wrong in a row and then earned 20 points. If her final score was 15 points, how many points were deducted for each incorrect answer?

Let *x* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Solution:

Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) Choose the correct numbers and operation symbols to show how you would solve the problem below. Fill in the blanks.



Anne’s family is traveling to her uncle’s house. The family travels 383.5 miles   
 between 10:15 am and 4:45 pm. Write a sequence of numbers and operations   
 to find the rate (avg speed). Fill in the blanks with the correct values.

Numbers to choose from: 10.25, 6.5, 383.5, 4.5   
 Operations to choose from: ÷ • + -

\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_ \_\_\_\_\_\_\_\_\_\_ = Rate (Average Speed)

Number Operation Symbol Number

  
6) The equation below has a solution of y = 4  
 2 y + 3 = 11

Write a two-step equation that has a solution of x = - 3